



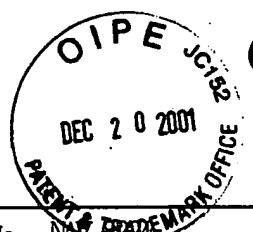
INFORMATION DISCLOSURE CITATION
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Atty. Docket No. NAV 8224		Serial No. 09/832,848					
Applicant Richard D. BUCHOLZ et al.							
Filing Date	April 12, 2001		Group 3737				
U.S. PATENT DOCUMENTS							
Examiner Initial*		Document Number	Date	Name	Class	Sub Class	Filing Date If Appropriate
<i>EJB</i>		5,222,499	06/29/93	Allen et al.	128	1	<i>JAN 14 2003</i>
		3,983,474	09/76	Kuipers	324	43B	<i>TECHNOLOGY CENTER R3700</i>
		4,182,312	01/80	Mushabac	433	68	
		4,341,220	07/82	Perry	606	130	
		4,608,977	09/86	Brown	128	303B	
		4,638,798	01/87	Sheldon et al.	128	303B	
		4,651,732	03/87	Frederick	128	303R	
		4,660,970	04/87	Ferrano	356	1	
		4,701,049	10/87	Beckman	356	1	
		4,705,395,	11/87	Hageniers	356	1	
		4,705,401	11/87	Addleman	356	376	
		4,706,665	11/87	Gouda	128	303B	
		4,709,156	11/87	Murphy	250	560	
		4,723,544	02/88	Moore et al.	128	303B	
		4,733,969,	03/88	Case et al.	356	375	<i>10300 MAIL ROOM</i>
		4,737,032	04/88	Addleman et al.	356	376	<i>JAN 7 2002</i>
		4,743,770	05/88	Lee	250	560	
		4,743,771	05/88	Sacks et al.	250	560	
		4,745,290	05/88	Frankel et al.	250	560	
		4,750,487	06/88	Zanetti	128	303B	
		4,753,528	06/88	Hines	356	1	
Examiner <i>ELBNC MANNER MECCASER</i>			Date Considered <i>5/31/2003</i>				

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<i>Esb</i>		4,761,072	08/88	Pryor	356	1	
		4,764,016	08/88	Johanasson	356	371	
		4,779,212	10/18/88	Levy	364	562	
		4,782,239	11/01/88	Hirose et al.	250	561	
		4,794,262	12/27/88	Sato et al.	250	560	
		4,791,934	12/20/88	Brunnett	606	130	
		4,809,694	03/07/89	Ferrara	128	303B	
		4,821,200	04/11/89	Oberg	364	474.24	
		4,822,163	04/18/89	Schmidt	356	1	
		4,825,091	04/25/89	Breyer et al.	250	560	
		4,829,373	05/09/89	Leberl et al.	358	88	
		4,836,778	06/06/89	Baumrind et al.	433	69	
		4,841,967	06/27/89	Chang et al.	128	303B	
		4,875,478	10/89	Chen	128	303B	<i>REC'D 3700 MAIL ROOM JAN - 7 2002</i>
		4,931,056	06/90	Ghajar et al.	606	653R	
		4,945,914	08/90	Allen	128	653R	
		4,991,579	02/91	Allen	128	653R	
		5,017,139	05/91	Mushabac	433	109	
		5,016,639	05/91	Allen	128	653R	
		5,027,818	07/91	Bova et al.	128	653R	
<i>NAB</i>		5,099,846	03/92	Hardy	606	130X	
Examiner <i>Esb</i>			Date Considered <i>5/31/2003</i>				

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<i>Edu</i>	5,094,241	03/92	Allen	128	653.1	<i>10 JAN - 7 2002</i>	
<i>A</i>	5,097,839	03/92	Allan	128	653.1	<i>RECEIVED 3700 MAIL ROOM</i>	
<i>A</i>	5,107,839	04/92	Houdek et al.	606	130X	<i>JAN - 7 2002</i>	
<i>A</i>	5,119,817	06/92	Allen	128	653.1	<i>RECEIVED 3700 MAIL ROOM</i>	
<i>A</i>	5,142,930	09/92	Allen et al.	74	469	<i>JAN - 7 2002</i>	
<i>N</i>	5,178,164	01/93	Allen	128	898	<i>RECEIVED 3700 MAIL ROOM</i>	
<i>N</i>	5,197,476	03/93	Nowacki et al.	128	66003	<i>JAN - 7 2002</i>	
<i>Edu</i>	5,211,164	05/93	Allen	128	653.1	<i>JAN - 7 2002</i>	
<i>Edu</i>	5,224,049	06/93	Mushabac	364	474.05	<i>JAN - 7 2002</i>	
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<i>Edu</i>	Yukio Kosugi et al., "An Articulated Neurosurgical Navigation System Using MRI and CT Images," <i>IEEE Transactions on Biomedical Engineering</i> , Vol. 35, No. 2, pp. 147-152, Feb. 1988.						
	Ralph Mösges et al., "A New Imaging Method for Intraoperative Therapy Control in Skull-Base Surgery," <i>Neurosurg.</i> , Rev. 11, pp. 245-247, 1988.						
	David W. Roberts, M.D., et al., "A Frameless Stereotaxic Integration of Computerized Tomographic Imaging and the Operating Microscope," <i>J. Neurosurg.</i> , Vol. 65, pp. 545-9, Oct. 1986.						
	M. Peter Heilbrun, M.D., "Computed Tomography-Guided Stereotactic Systems," <i>Clinical Neurosurgery</i> , pp. 564-80, 1983.						
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<i>EJL</i>		DES 291,246	08/04/87	Lower			
		DES 349,573	08/09/94	Bookwalter			
		DES 353,668	12/20/94	Banks			
		DES 357,534	04/18/95	Hayes			
		DES 359,557	06/20/95	Hayes			
		3,821,469	06/28/74	Whetstone et al.			
<i>EJL</i>		3,963,028	06/15/76	Cooley et al.			
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		Document Number	Date	Country	Class	Sub Class	Translation Yes or No
<i>EJL</i>		0 062 941	10/82	EPO	A61B	5/10	N/A
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<i>EJL</i>		Pixsys, Inc., "Alignment Procedure for the Pixsys Two-Emitter Offset Probe for the SAC GP-8-3d Sonic Digitizer" (undated), 3 unnumbered pages.					
		Pixsys, Inc., "Pixsys: 3-D Digitizing Accessories," August 1989, 6 unnumbered pages.					
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		D.E. Bullard, et al., "CT-Guided Stereotactic Biopsies Using a Modified Frame and Gildenberg Techniques," <i>J. of Neurology, Neurosurgery and Psychiatry</i> , Vol. 47, pp. 590-595, January 5, 1984.					
		J.M. Van Buren, et al., "A Multipurpose CT-Guided Stereotactic Instrument of Simple Design," <i>Proc. Of the American Soc. Stereotactic and Functional Neurology</i> , Vol. 46, pp. 211-6, 1983.					
Examiner	<i>EJL</i>	Date Considered				<i>5/31/2003</i>	
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U.S. PATENT DOCUMENTS			
Examiner Initial*	Document Number	Date	Name
EBO	4,058,114	11/15/77	Soldner
	4,068,156	01/10/78	Johnson et al.
	4,117,337	09/26/78	Staats
	4,209,254	06/24/80	Reymond
	4,259,725	03/31/81	Andrews et al.
	4,341,220	07/27/82	Perry
	4,358,856	11/09/82	Stivender, et al.
V	4,368,556	01/18/83	Wanner et al.
	4,396,945	08/02/83	DiMatteo et al.
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V	Eric H. Friets, et al., "A Frameless Stereotaxic Operating Microscope for Neurosurgery," IEEE Transactions on Biomedical Engineering, Vol. 36, No. 6, June 1989.		
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U.S. PATENT DOCUMENTS						
Examiner Initial*		Document Number	Date	Name	Class	Sub Class
<i>Elt</i>		4,419,012	12/06/83	Stephenson		
		4,457,311	07/03/84	Sorenson et al.		
		4,465,069	08/14/84	Barbier, et al.		
		4,473,074	09/25/84	Vassiliadis		
		4,506,676	03/26/85	Duska		
		4,543,959	10/01/85	Sepponen		
		4,571,834	2/25/86	Fraiser et al		
		4,583,538	4/22/86	Onic et al.		
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U.S. PATENT DOCUMENTS			
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<i>ECD</i>	4,649,504	3/10/87	Krouglicof et al.
	4,651,732	3/24/87	Frederick
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<i>ECD</i>	Edward C. Benzel et al., "Magnetic Source Imaging: A Review of the Magne System of Biomagnetic Technologies Incorporated," <i>Neurosurgery</i> , Vol 33, No.2, pp. 252-9, August 1993.		
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<i>GJB</i>		4,686,997	8/18/87	Oloff et al.
		4,698,777	10/06/87	Toyoda et al.
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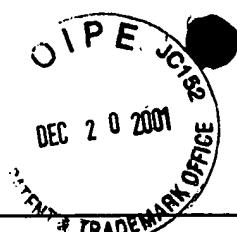
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Atty. Docket No. NAV 8224		Serial No. 09/832,848					
Applicant Richard D. BUCHOLZ et al.							
Filing Date April 12, 2001		Group 3737					
U.S. PATENT DOCUMENTS							
Examiner Initial*		Document Number	Date	Name	Class	Sub Class	Filing Date If Appropriate
<i>Ebo</i>		4,762,016	8/9/88	Stoughton et al.			
		4,764,015	8/16/88	Bieringer et al.			
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<i>Ebo</i>		Amami Kato, M.D., et al., "A Frameless, Armless Navigational System for Computer-Assisted Neurosurgery," <i>J. Neurosurg.</i> , Vol. 74, pp. 845-9, May 1991.					
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U.S. PATENT DOCUMENTS			
Examiner Initial*	Document Number	Date	Name
<i>EB</i>	4,788,481	11/29/88	Niwa
<i>↓</i>	4,793,355	12/27/88	Crum et al.
<i>↓</i>	4,803,645	2/7/89	Ohtomo et al.
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<i>EB</i>	S. Lavallee et al., "Computer Assisted Puncture," Afcet, Tome 1, pp. 439-49 Nov. 1987.		
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<i>↓</i>	J. F. Mallet, M.D., et al., "Post-Laminectomy Cervical-Thoracic Kyphosis in a Patient with Von Recklinghausen's Disease," <i>Spinal Frontiers</i> , Vol. 3, Issue 1, April 1996.		
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<i>↓</i>	F. Mesqui et al., "Real-Time, Noninvasive Recording and Three-Dimensional Display of the Functional Movements of an Arbitrary Mandible Point," <i>SPIE Biostereometrics '85</i> , Vol. 602, pp. 77-84, December 3-6, 1985.		
<i>↓</i>	Klaus Oberfell et al., "Vision Sensing for Control of Long-Reach Flexible Manipulators," Research Paper, Georgia Institute of Technology, 6 pages.		
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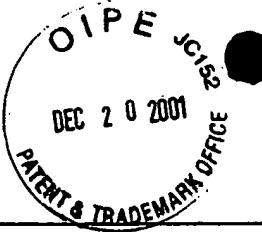
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Atty. Docket No. NAV 8324		Serial No. 09/832,848					
Applicant Richard D. BUCHOLZ et al.							
Filing Date April 12, 2001		Group 3737					
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Examiner Initial*		Document Number	Date	Name	Class	Sub Class	Filing Date If Appropriate
<i>Gee</i>		4,821,206	4/11/89	Arora			
		4,835,710	5/30/89	Schnelle et al.			
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			C.A. Pelizzari et al., "Interactive 3D Patient-Image Registration" <i>Information Processing in Medical Imaging, Proceedings</i> , pp. 132-141, July 1991.				
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			PixSys Inc, "Real-Time Image-Guided Surgery and Planning, FlashPoint 3D Localizer," <i>Investigational Device Brochure</i> , 3 pages (unnumbered and undated).				
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			H. F. Reinhardt et al., "Mikrochirurgische Entfernung tiefliegender Gefäßbildung mit Hilfe der sonar-Stereometrie," <i>Ultraschall in Med.</i> 12, pp. 80-4, 1991.				
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Applicant Richard D. BUCHOLZ et al.							
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U.S. PATENT DOCUMENTS							
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<i>Eto</i>		4,896,673	1/30/90	Rose et al.			
		4,933,843	6/12/90	Scheller et al.			
		4,943,296	7/29/90	Funakubo et al.			
		4,955,891	9/11/90	Carol			
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		Pascal Sautot, et al., "Computer Assisted Spine Surgery: a First Step Toward Clinical Application in Orthopaedics," 14th IEEE EMBS, pp. 1071-1072, 1992					
		Christine S. Siegel, "Creating 3D Models from Medical Images Using AVS," Research Paper, N.Y.U. School of Medicine, 4 pages.					
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<i>V</i>		Watanabe, "Neuronavigator," Igaku-no-Ayumi, Vol. 137, No. 6, 4 pages, May 10, 1986 (with translation).					
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<i>EGB</i>		4,961,422	10/9/90	Marchosky			
		4,982,188	1/1/91	Fodale et al.			
		5,005,142	4/2/91	Lipchak et al.			
		5,039,867	8/13/91	Nishihara et al.			
		5,047,036	9/10/91	Koutrouvelis			
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		5,059,789	10/22/91	Salcudean et al.			
		5,078,140	1/7/92	Kwoh			
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		5,186,174	2/16/93	Schlondorff et al.			
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		5,261,404	11/16/93	Mick et al.			
		5,279,309	1/18/94	Taylor et al.			
Examiner <i>EGB</i>			Date Considered				

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Applicant Richard D. BUCHOLZ et al.			
Filing Date April 12, 2001		Group 3737	
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Examiner Initial*	Document Number	Date	Name
<i>GK</i>	5,291,889	3/8/94	Kenet et al.
	5,295,200	3/15/94	Boyer
	5,295,483	3/22/94	Nowacki et al.
	5,299,288	3/29/94	Glassman et al.
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	5,309,913	5/10/94	Kormos et al.
	5,355,129	10/11/94	Baumann
	5,357,953	10/25/94	Merrick et al.
	5,359,417	10/25/94	Muller et al.
	5,368,030	11/29/94	Zinreich et al.
<i>G</i>	5,371,778	12/6/94	Yanof et al.
	5,383,454	1/24/95	Bucholz
	5,389,101	2/14/95	Heilbrum et al.
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	5,447,154	9/5/95	Cinquini et al.
Examiner <i>GK</i>		Date Considered <i>5/31/2003</i>	

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U.S. PATENT DOCUMENTS			
Examiner Initial*	Document Number	Date	Name
<i>GDH</i>	5,480,422	1/2/96	Ben-Haim
	5,483,961	1/16/96	Kelly et al.
	5,490,196	2/6/96	Rudich et al.
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	B1 5,383,454	12/31/96	Bucholz (re-exam)
	5,603,318	2/18/97	Heilbrun et al.
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Examiner <i>GDH</i>	Date Considered		<i>5/31/2003</i>

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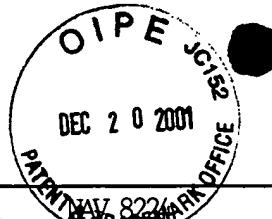
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Applicant Richard D. BUCHOLZ et al.							
Filing Date	April 12, 2001		Group 3737				
U.S. PATENT DOCUMENTS							
Examiner Initial*		Document Number	Date	Name	Class	Sub Class	Filing Date If Appropriate
<i>EBS</i>		5,622,170	4/22/97	Schulz			
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		5,732,703	03/31/98	Kalfas et al.	128	653.1	
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		5,649,936	07/22/97	Real	606	130	
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		0 155 857	1/29/85	EPO			
		0 207 452	1/7/87	EPO			
		0 322 363	6/28/89	EPO			
		0 326 768	8/9/89	EPO			
		0 359 773	3/28/90	EPO			
		0 427 358	5/15/91	EPO			
		0 456 103	11/13/91	EPO			
		0 469 966	2/5/92	EPO			
		0 501 993	5/11/96	EPO			
		0 581 704	2/2/94	EPO			
		0 603 089	6/22/94	EPO			
		2 094 590	9/15/82	UK (Abele et al.)			
		2 417 970	10/26/79	France (Richter)			
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FOREIGN PATENT DOCUMENTS							
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<i>SM</i>		DE3 508 730 A1	9/18/86	Germany			
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<i>V</i>		WO 96/11624	4/25/96	PCT			
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Atty. Docket No. <i>NAV 8224</i>		Serial No. 09/832,848
Applicant Richard D. BUCHOLZ et al.		
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Applicant Richard D. Bucholz et al.							
Filing Date April 12, 2001		Group 3737					
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NAV 8224	09/832,848
Applicant	
Richard D. BUCHOLZ et al.	
Filing Date	Group
April 12, 2001	3737
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
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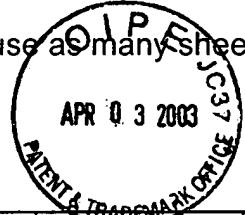
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STATEMENT BY APPLICANT**

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Sheet	1	of	1	Attorney Docket No.	Nav 8224
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U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code ² (if known)		
EPM	377	6,347,240	B1	Foley et al.	02-12-2002
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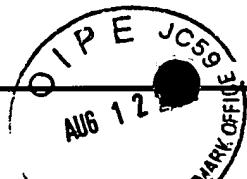
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Complete if Known

Application Number	09/832,848
Filing Date	April 12, 2001
Confirmation Number	2372
First Named Inventor	Bucholz et al.
Group Art Unit	3737
Examiner Name	E. Mantis Mercader

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Attorney Docket No.

NAV 8224

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Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T ⁶
		Office	Number ⁴	Kind Code ² (if known)			
<i>EM</i>	1	JP	62-74385 (abstract)		Nanbu	03/30/1987	<input checked="" type="checkbox"/>

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